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**SYSTEM AND METHOD FOR DETECTING CARDIAC ISCHEMIA  
BASED ON T-WAVES USING AN IMPLANTABLE MEDICAL DEVICE**

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**Abstract of the Disclosure**

A technique is provided for detecting episodes of cardiac ischemia  
10 based on an examination of the total energy of T-waves. Since cardiac  
ischemia is often a precursor to acute myocardial infarction (AMI) or  
ventricular fibrillation (VF), the technique thereby provides a method for  
predicting the possible onset of AMI or VF. Briefly, the technique  
integrates internal electrical cardiac signals occurring during T-waves and  
15 then compares the result against a running average. If the result exceeds  
the average by some predetermined amount, ischemia is thereby  
detected and a warning signal is provided to the patient. The maximum  
slope of the T-wave is also exploited. Techniques are also set forth herein  
for reliably detecting T-waves, which help prevent P-waves from being  
20 misinterpreted as T-waves on unipolar sensing channels. The T-wave  
detection technique may be used in conjunction with ischemia detection  
or for other purposes.